



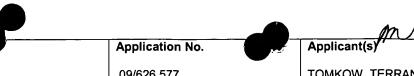


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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO. CONFIRMATION NO.			
09/626,577	07/27/2000	Terrance A. Tomkow	17497-16 9588			
7:	590 05/20/2004	EXAMI	EXAMINER			
	PATTON LEE & UTEC R. ROSTON HOWARD I	•	NGUYEN, T	NGUYEN, THU HA T		
	DRIVE, TENTH FLOOR		ART UNIT PAPER NUMBER 2155			
LOS ANGELE	S, CA 90045					
			DATE MAILED: 05/20/2004	14		

Please find below and/or attached an Office communication concerning this application or proceeding.



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09/626,577	TOMKOW, TE	TOMKOW, TERRANCE A.		
Examiner	Art Unit			
Thu Ha T. Nguyen	2155			

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**Period for Reply** 

#### A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.

  If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.

<ul> <li>Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).         Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).     </li> </ul>
Status
1) Responsive to communication(s) filed on 17 February 2004.
2a) This action is <b>FINAL</b> . 2b) ☑ This action is non-final.
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.
Disposition of Claims
4)⊠ Claim(s) <u>115-120,145-150,159-183,187-191 and 226-242</u> is/are pending in the application.
4a) Of the above claim(s) is/are withdrawn from consideration.
5) Claim(s) is/are allowed.
6) Claim(s) <u>115-120,145-150,159-183,187-191 and 226-242</u> is/are rejected.
7) Claim(s) is/are objected to.
8) Claim(s) are subject to restriction and/or election requirement.
Application Papers
9)☐ The specification is objected to by the Examiner.
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.
Priority under 35 U.S.C. § 119
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
<ol> <li>Certified copies of the priority documents have been received.</li> </ol>
2. Certified copies of the priority documents have been received in Application No
3. Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
Attachment(s)
1) Notice of References Cited (PTO-892)  4) Interview Summary (PTO-413)
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) Paper No(s)/Mail Date
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  Paper No(s)/Mail Date 7.8.10.  5) Notice of Informal Patent Application (PTO-152)  Other:



Art Unit: 2155

#### **DETAILED ACTION**

- 1. Claims 115-121, 145-150, 159-183, 187-191, 226-242 are presented for examination.
- Applicant is requested to provide IDS form of PTO-1449 of paper no. 8
   sent July 09, 2003 in order Examiner considers references cited.

### Claim Rejections - 35 USC § 112

- 3. The following is a quotation of the second paragraph of 35 U.S.C. 112: The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 4. Claims 146-147 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. For purpose of examination, Examiner assumes claim 146 dependents on claim 145 and claim 147 dependents on claim 146. However, if Applicants intend to have claim 146 dependents on claim 237, then claim 146 is rejected under 35 U.S.C. 112, second paragraph, as lack of antecedent basis. In claim 146 recites limitations "the server" (line 13, 14, 16, 18), "the path" (line 16, 18), and "the destination address" (line 18-19). There is insufficient antecedent basis for this limitation in the claim. Appropriate correction is required.

## Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C.
 § 102 that form the basis for the rejections under this section made in this Office action:
 A person shall be entitled to a patent unless --



Art Unit: 2155

(b)),

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

- Claims 115-121, 145-150, and 230-242 are rejected under 35 U.S.C.
   102(b) as being anticipated by Barkan International Publication No. WO 98/17042.
- 6. As to claim 115, **Barkan** teaches the invention as claimed, including a method of transmitting a message from a sender to a destination address through a server displaced from the destination address (abstract), the steps at the server of: receiving the message from the sender (abstract, p.23-24, step (h). p.19, step

transmitting the message to the destination address (abstract, p.12, steps (a, b, c), p.23-24, step (h), p.30, step (d)),

receiving at the server an indication from the destination address that the message has been received at the destination address from the server (abstract, p.8, p.19, p.29, step c),

providing at the server a digital signature of the message (p.9, p.31-32), and transmitting to the sender the message and the digital signature of the message for storage by the sender (p.33, 1<sup>st</sup> paragraph, mail server 3 sends proof of receipt message and encrypted message from recipient (user 2) and stores in mail box 12 belonging to sender (user 1)).



- 7. As to claim 116, **Barkan** teaches the invention as claimed, the step at the server of: discarding the message and the digital signature of the message after the transmission of the message and the digital signature of the message to the sender (p.35, step 1).
- 8. As to claim 117, **Barkan** teaches the invention as claimed, including steps at the server of: receiving from the sender a copy of the message and the digital signature of the message (p.34, step j), generating digital fingerprints of the message and the digital signature received from the sender (p. 23-24, steps j-h, p.31-p.32), comparing the digital fingerprints, and authenticating the message on the basis of the results of the comparison (p. 23-24, steps j-h, p.31-p.32).
- 9. As to claim 118, **Barkan** teaches the invention as claimed, including the steps at server of: providing at the server, at the same time as the provision of the digital signature of the message at the server, an attachment including the identity of the sender and the identity and address of the server and the destination address all as received by the server from the destination address (p.23, 30), generating a digital signature of the attachment, and transmitting to the sender the attachment including the identity of the sender, the identity and address of the server and the destination address and the digital signature of the attachment, at the same time as the transmission of the message, and the digital signature of the message, to the sender (p.23, 29-30, 34).



- 10. As to claim 119, **Barkan** teaches the invention as claimed, including the steps at the server of: receiving an attachment from the destination address (abstract, p.8, p.19, p.29, step c), providing at the server a digital signature of the attachment, transmitting to the sender, at the same time as the transmission of the message and the digital signature of the message, the attachment and the digital signature of the attachment (p.23, 29-30, 34).
- 11. As to claim 120, **Barkan** teaches the invention as claimed, including the steps at the server of: receiving from the sender copies of the message and the attachment and the digital signatures of the message and the attachment, generating digital fingerprints of the message and the digital signature of the message and digital fingerprints of the attachment and the digital signature of the attachment, and comparing the digital fingerprints of the message and the digital signature of the message and comparing the digital fingerprints of the attachment and the digital signature of the attachment to authenticate the message and the attachment (p. 23-24, steps j-h, p.29-30, 31-32, 34).
- 12. As to claim 121, **Barkan** teaches the invention as claimed, including the steps at the server of: receiving the message and the digital signature of the message at the server from the sender, and authenticating the message at the server on the basis of the message and the digital signature received by the server from the sender (p. 23-24, steps j-h, p.29-30).





- 13. As to claim 145, **Barkan** teaches the invention as claimed, including a method of transmitting a message from a sender to a destination address for a recipient through a server displaced from the destination address, including the steps at the server of: receiving the message from the sender (abstract, p.23-24, step (h). p.19, step (b)), transmitting the message to the destination address through a path including servers between the server and the destination address (p. 13, 22-24, the e-mail message sends from sender (i.e. user 1) through mail server to receiver (i.e. user 2) through paths (i.e. communication links 13, 23) figure 1, p.13), and transmitting to the sender the message and the path of transmission of the message between the server and the destination address (p.9, 13, 22-24, 31-32).
- 14. As to claim 146, **Barkan** teaches the invention as claimed, wherein the server receives from the sender the message and the path of transmission of the message between the server and the destination address and wherein the server authenticates the message on the basis of the message and the path of transmission of the message between the server and the destination address (figure 1, p. 23-24, steps j-h, p.31-32).
- 15. As to claim 147, **Barkan** teaches the invention as claimed, wherein the server does not retain the message after it transmits the message to the sender (p.35, step 1).



- 16. As to claim 148, **Barkan** teaches the invention as claimed, wherein the destination address is one of a plurality of destination addresses receiving the message from the server (figure 1, p.14, 15).
- 17. As to claim 149, **Barkan** teaches the invention as claimed, wherein the path of transmission of the message between the server and the destination address includes the identity and address of the server and a recipient at the destination address (p.23, 29-30, 34).
- 18. As to claim 150, **Barkan** teaches the invention as claimed, wherein the server does not retain the message after it transmits the message to the sender and wherein the destination address is one of a plurality of destination addresses receiving the message from the server and wherein the message has an attachment and wherein the attachment identifies the path of transmission of the message between the server and the destination address (p.23, 29-30, 34, p.35, step 1).
- 19. As to claim 230, **Barkan** teaches the invention as claimed, including a method of authenticating a message provided by a sender and transmitted to a destination server by a second server displaced from the sender and the destination server, the steps at the second server of: providing an attachment including the identity and address of the second server and the



Art Unit: 2155

identity and address of the destination server, and transmitting, the attachment from the second server to the sender (abstract, p.12, steps (a, b, c), p.23-24, step (h), p.30, step (d), p.33, 1<sup>st</sup> paragraph, p.34).

- 20. As to claim 231, **Barkan** teaches the invention as claimed, wherein the attachment includes the address and identity of intermediate stations receiving the attachment on the transmission of the message between the second server and the destination server (p.44, step e).
- 21. As to claim 232, **Barkan** teaches the invention as claimed, including the steps at the second server of: providing a digital signature of the attachment at the second server, and transmitting the digital signature from the second server to the sender at the time of transmitting the attachment from the second server to the sender (abstract, p.12, steps (a, b, c), p.23-24, step (h), p.30, step (d), p.33, 1<sup>st</sup> paragraph, p.34).
- 22. As to claim 233, **Barkan** teaches the invention as claimed, including the steps at the second server of: providing a digital signature of the attachment at the second server, and transmitting the digital signature from the second server to the sender at the time of transmitting the attachment from the second server to the sender (abstract, p.12, steps (a, b, c), p.23-24, step (h), p.30, step (d), p.33, 1<sup>st</sup> paragraph, p.34).



- 23. As to claim 234, **Barkan** teaches the invention as claimed, including the steps at the second server of: receiving the attachment at the digital signature at the second server from the sender (abstract, p.12, steps (a, b, c), p.23-24, step (h), p.30, step (d), p.33, 1<sup>st</sup> paragraph, p.34), and authenticating the attachment at the second server on the basis of the attachment and the digital signature received by the second server from the sender (p.23-24, steps j-h, p.31-p.32).
- 24. As to claim 235, **Barkan** teaches the invention as claimed, including the steps at the second server of: authenticating the attachment at the second server on the basis of the attachment and the digital signature received by the second server from the sender (p.23-24, steps j-h, p.31-p.32).
- 25. As to claim 236, **Barkan** teaches the invention as claimed, including the steps at the second server of: receiving the attachment and the digital signature at the second server from the sender (abstract, p.12, steps (a, b, c), p.23-24, step (h), p.30, step (d), p.33, 1<sup>st</sup> paragraph, p.34), providing at the second server digital fingerprints of the attachment and the digital signature received at the second server from the sender, and comparing the digital fingerprints to authenticate the attachment (p.23-24, steps j-h, p.31-p.32).
- 26. As to claim 237, **Barkan** teaches the invention as claimed, including the steps at the second server of: receiving the attachment and the digital signature at the



Art Unit: 2155

second server from the sender (abstract, p.12, steps (a, b, c), p.23-24, step (h), p.30, step (d), p.33, 1<sup>st</sup> paragraph, p.34), providing at the second server digital fingerprints of the attachment and the digital signature received at the second server from the sender, and comparing the digital fingerprints to authenticate the attachment (p.23-24, steps j-h, p.31-p.32).

- 27. As to claim 238, **Barkan** teaches the invention as claimed, including a method of verifying at a server a delivery of an electronic message to a destination address, the steps of: transmitting the electronic message between the server and the destination address (abstract, p.23-24, step (h). p.19, step (b)), receiving at the server the path of transmission of the message between the server and the destination address, the path including servers between the server and the destination address (p. 13, 22-24, the e-mail message sends from sender (i.e. user 1) through mail server to receiver (i.e. user 2) through paths (i.e. communication links 13, 23) figure 1, p.13), and transmitting to the sender the message and the path of transmission of the message between the server and the destination address (p.9, 13, 22-24, 31-32).
- 28. As to claim 239, **Barkan** teaches the invention as claimed, wherein the server does not retain the message or the path of transmission of tile message between the server and the destination address after the server transmits to the sender the message and the path of transmission of the message between the server and the destination address (p.35, step 1).





- 29. As to claim 240, **Barkan** teaches the invention as claimed, wherein the server receives from the sender the message and the path of transmission of the message between the server and the destination address (abstract, p.12, steps (a, b, c), p.23-24, step (h), p.30, step (d), p.33, 1<sup>st</sup> paragraph, p.34) and wherein the server authenticates the message on the basis of the message, and the path of transmission of the message between the server and the destination address, received by the server from the sender (p.23-24, steps j-h, p.31-p.32).
- 30. As to claim 241, **Barkan** teaches the invention as claimed, wherein the server provides a digital signature of the message and transmits the digital signature with the message to the sender and wherein the server receives from the sender the message and the digital signature of the message and wherein the server provides digital fingerprints of the message and the digital signature and compares the digital fingerprints to authenticate the message (abstract, p.12, steps (a, b, c), p.23-24, steps j-h, p.31-p.32).
- 31. As to claim 242, **Barkan** teaches the invention as claimed, wherein the server provides a digital signature of the path of transmission of the message between the server and the destination address and transmits the digital signature to the sender with the path of transmission and wherein the server receives from the sender the path of transmission and the digital signature of the path of transmission and wherein the



Art Unit: 2155

server provides digital fingerprints of the path of transmission and the digital signature of the path of the transmission and compares the digital fingerprints to authenticate the message (abstract, p.12, steps (a, b, c), p.23-24, steps j-h, p.31-p.32).

### Claim Rejections - 35 USC § 103

- 32. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 33. Claims 159-183, 187-191, and 226-229 are rejected under 35 U.S.C. § 103 (a) as being unpatentable over **Barkan** International Publication No. **WO** 98/17042, in view of **Zabetian** U.S. Patent No. 6,327,656.
- 34. As to claim 159, **Barkan** teaches the invention as claimed, including a method of providing a delivery at a server of an electronic message from the server to a destination address, including the steps of: receiving at the server an electronic message from a sender for transmission to the destination address (abstract, p.23-24, step (h). p.19, step (b)), transmitting the electronic message from the server to the destination address (abstract, p.12, steps (a, b, c), p.23-24, step (h), p.30, step (d)) and



Page 13



Application/Control Number: 09/626,577

Art Unit: 2155

receiving at the server the transmission of the electronic message between the server and the destination address (abstract, p.8, p.19, p.29, step c). However, **Barkan** does not explicitly teach transmitting a message via a protocol selected from a group consisting of an SMTP protocol and an ESMTP protocol. **Zabetian** teaches the electronic documents send between clients and servers using conventional protocols such as SMTP, FTP, HTTP, and other network protocol could be used to transmit electronic documents (col. 4 lines 25-55, col. 6 lines 21-37, col. 14 lines 53-66). It would have been obvious to one of ordinary skill in the Data Processing art at the time of the invention was made to combine the teachings of **Barkan and Zabetian** to include the step of using a protocol selected from a group of network conventional protocols because it would have an efficient communications system that has a capability for users to send and attach various kinds of files to electronic mail (including electronic document certification, verification, digital signature).

35. As to claim 160, **Barkan** teaches the invention as claimed, including the steps of: including in the transmission between the server and the destination address, the identify of the of the sender, the identity and address of the server and the destination address (p.23, 29-30, 34). However, **Barkan** does not explicitly teach transmitting a message via the selected one of the protocols. **Zabetian** teaches the electronic documents send between clients and servers using conventional protocols such as SMTP, FTP, HTTP, and other network protocol could be used to transmit electronic documents (col. 4 lines 25-55, col. 6 lines 21-37, col. 14 lines 53-66). It



Art Unit: 2155

would have been obvious to one of ordinary skill in the Data Processing art at the time of the invention was made to have the same motivation as set forth in claim 159, supra.

- 36. As to claim 161, **Barkan** teaches the invention as claimed, including the steps of: providing a transmission of the message from the server to the sender, including, in the transmission from the server to the sender, a digital signature of the electronic message (p.9, 31-32, 33, 1<sup>st</sup> paragraph).
- 37. As to claim 162, **Barkan** teaches the invention as claimed, including the step of: recording, in the transmission between the server and the destination address the time for the transmission of the message from the server to the destination address and the time for the receipt of the message at the destination address (p.22-24). However, **Barkan** does not explicitly teach transmitting a message via the selected one of the protocols. **Zabetian** teaches the electronic documents send between clients and servers using conventional protocols such as SMTP, FTP, HTTP, and other network protocol could be used to transmit electronic documents (col. 4 lines 25-55, col. 6 lines 21-37, col. 14 lines 53-66). It would have been obvious to one of ordinary skill in the Data Processing art at the time of the invention was made to have the same motivation as set forth in claim 159, supra
- 38. As to claim 163, **Barkan** teaches the invention as claimed, including the steps of: including, in the transmission of the message between the server and the





Art Unit: 2155

sender a digital signature of the transmission of the electronic message between the server and the destination address and recording, in the transmission between the server and the destination address the time for the transmission of the message from the server to the destination address and the time for the receipt of the message at the destination address (abstract, p.8, 9, 19, 22-24, 28-29, step c, p.31-32, 51). However, **Barkan** does not explicitly teach transmitting a message via the selected one of the protocols. **Zabetian** teaches the electronic documents send between clients and servers using conventional protocols such as SMTP, FTP, HTTP, and other network protocol could be used to transmit electronic documents (col. 4 lines 25-55, col. 6 lines 21-37, col. 14 lines 53-66). It would have been obvious to one of ordinary skill in the Data Processing art at the time of the invention was made to have the same motivation as set forth in claim 159, supra.

39. As to claim 164, **Barkan** teaches the invention as claimed, including the step of: including, in the transmission of the message between the server and the destination address the status of the delivery of the message at the destination address from the server (p.31, 35, 51). However, **Barkan** does not explicitly teach transmitting a message via the selected one of the protocols. **Zabetian** teaches the electronic documents send between clients and servers using conventional protocols such as SMTP, FTP, HTTP, and other network protocol could be used to transmit electronic documents (col. 4 lines 25-55, col. 6 lines 21-37, col. 14 lines 53-66). It would have





Art Unit: 2155

been obvious to one of ordinary skill in the Data Processing art at the time of the invention was made to have the same motivation as set forth in claim 159, supra.

- 40. As to claim 165, **Barkan** teaches the invention as claimed, including the step of: receiving at the server a delivery status notification relating to the status of the delivery of the message at the destination address and the delivery of the message from the destination address to a recipient (abstract, p.8, p.19, p.29, step c. p.31, 35, 51).
- 41. As to claim 166, **Barkan** teaches the invention as claimed, including a method of verifying at a first server a delivery of an electronic message to a destination server for a recipient, the steps at the first server of: transmitting the electronic message from the first server to the destination server (abstract, p.23-24, step (h). p.19, step (b), figure 1, user B and mail box of user B read as destination server), receiving at the first server from the destination server transmission between the first server and the destination server (abstract, p.8, p.19, p.29, step c), and transmitting from the first server to the sender the message and the transmission between the first server and the destination server (abstract, p.12, steps (a, b, c), p.23-24, step (h), p.30, step (d), p.33, 1st paragraph). However, **Barkan** does not explicitly teach transmitting a message via a protocol selected from a group consisting of an SMTP protocol and an ESMTP protocol. **Zabetian** teaches the electronic documents send between clients and servers using conventional protocols such as SMTP, FTP, HTTP, and other network protocol could be



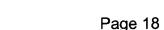
Page 17

Application/Control Number: 09/626,577

Art Unit: 2155

used to transmit electronic documents (col. 4 lines 25-55, col. 6 lines 21-37, col. 14 lines 53-66). It would have been obvious to one of ordinary skill in the Data Processing art at the time of the invention was made to combine the teachings of **Barkan and Zabetian** to include the step of using a protocol selected from a group of network conventional protocols because it would have an efficient communications system that has a capability for users to send and attach various kinds of files to electronic mail (including electronic document certification, verification, digital signature).

- 42. As to claim 167, **Barkan** teaches the invention as claimed, including transmitting from the first server to the sender the message at the time of the completion of the transmission of the message between of the first server and the destination server (abstract, p.8, 19, 29, step c, p. 45, 51). However, **Barkan** does not explicitly teach transmitting a message via the selected one of the protocols. **Zabetian** teaches the electronic documents send between clients and servers using conventional protocols such as SMTP, FTP, HTTP, and other network protocol could be used to transmit electronic documents (col. 4 lines 25-55, col. 6 lines 21-37, col. 14 lines 53-66). It would have been obvious to one of ordinary skill in the Data Processing art at the time of the invention was made to have the same motivation as set forth in claim 166, supra.
- 43. As to claim 168, **Barkan** teaches the invention as claimed, including the step of: discarding the message at the first server after the transmission of the message by the first server to the destination sender (p.35, step 1). However, **Barkan** does not





Art Unit: 2155

explicitly teach transmitting a message via the selected one of the protocols. **Zabetian** teaches the electronic documents send between clients and servers using conventional protocols such as SMTP, FTP, HTTP, and other network protocol could be used to transmit electronic documents (col. 4 lines 25-55, col. 6 lines 21-37, col. 14 lines 53-66). It would have been obvious to one of ordinary skill in the Data Processing art at the time of the invention was made to have the same motivation as set forth in claim 166, supra

- 44. As to claim 169, **Barkan** teaches the invention as claimed, including the steps of: providing at the first server a digital signature of the message and transmitting the digital signature of the message from the first server to the sender at the time of the message from the first server to the sender (abstract, p.8, p.19, p.29, step c).
- 45. As to claim 170, **Barkan** teaches the invention as claimed, including the steps of: transmitting from the first server to the sender the message after the transmission of the message between the first server and the destination server (abstract, p.8, p.19, p.29, step c), and releasing the message at the first server after the transmission of the message by the first server to the sender (p.35, step 1). However, **Barkan** does not explicitly teach transmitting a message via the selected one of the protocols. **Zabetian** teaches the electronic documents send between clients and servers using conventional protocols such as SMTP, FTP, HTTP, and other network protocol could be used to transmit electronic documents (col. 4 lines 25-55, col. 6 lines 21-37, col. 14 lines 53-66). It would have been obvious to one of ordinary skill in the



Page 19

Application/Control Number: 09/626,577

Art Unit: 2155

Data Processing art at the time of the invention was made to have the same motivation as set forth in claim 166, supra.

- 46. As to claim 171, **Barkan** teaches the invention as claimed, including the step of: transmitting between the first server and the destination server the identity of the sender the identity and address of the first server and the identity and address of the destination server and the time of the receipt of the message by the first server and the time of the transmission to the first server from the destination server of the identity of the sender, the identity and address of the first server and address of the destination server (p. 23, 30, 34 50).
- 47. As to claim 172, **Barkan** teaches the invention as claimed, including the step of: receiving at the first server from the destination server a delivery status notification indicating the status of the delivery of the message from the first server to the destination server and the time of the transmission of the delivery status notification by the destination server to the first server (abstract, p.8, p.19, p.29, step c, p.45, 51).
- 48. As to claim 173, **Barkan** teaches the invention as claimed, including a method of verifying at a first server a message received by the first server from a sender and transmitted by the first server to a destination server for a recipient, the step of: receiving at the first server from the destination server an attachment including transmissions between the first server and the destination server relating to the



Page 20

Application/Control Number: 09/626,577

Art Unit: 2155

message from the sender (abstract, p.8, p.19, p.29, step c), transmitting from the first server to the sender the message and the attachment including the transmissions between the first server and the destination server (abstract, p.12, steps (a, b, c), p.23-24, step (h), p.30, step (d), p.33, 1st paragraph), transmitting from the sender to the first server the message and the attachment, and authenticating the message on the basis of the message and the attachment (p. 23-24, steps j-h, p.29, 30, 31-32, 34). However, Barkan does not explicitly teach transmitting a message via a protocol selected from a group consisting of an SMTP protocol and an ESMTP protocol. Zabetian teaches the electronic documents send between clients and servers using conventional protocols such as SMTP, FTP, HTTP, and other network protocol could be used to transmit electronic documents (col. 4 lines 25-55, col. 6 lines 21-37, col. 14 lines 53-66). It would have been obvious to one of ordinary skill in the Data Processing art at the time of the invention was made to combine the teachings of Barkan and Zabetian to include the step of using a protocol selected from a group of network conventional protocols because it would have an efficient communications system that has a capability for users to send and attach various kinds of files to electronic mail (including electronic document certification, verification, digital signature).

49. As to claim 174, **Barkan** teaches the invention as claimed, wherein the attachment includes transmissions between servers intermediate, the first server and the destination server (figure 5).





- step of: removing the message from the first server when the first server transmits to the sender the message and the attachment (p.35, step 1). However, **Barkan** does not explicitly teach transmitting a message via a protocol selected from a group consisting of an SMTP protocol and an ESMTP protocol. **Zabetian** teaches the electronic documents send between clients and servers using conventional protocols such as SMTP, FTP, HTTP, and other network protocol could be used to transmit electronic documents (col. 4 lines 25-55, col. 6 lines 21-37, col. 14 lines 53-66). It would have been obvious to one of ordinary skill in the Data Processing art at the time of the invention was made to combine the teachings of **Barkan and Zabetian** to include the step of using a protocol selected from a group of network conventional protocols because it would have an efficient communications system that has a capability for users to send and attach various kinds of files to electronic mail (including electronic document certification, verification, digital signature).
- 51. As to claim 176, **Barkan** teaches the invention as claimed, including the steps of: receiving at the first server from the destination server the transmission of the identity of the sender, the identity and address of the first server and the identity and address of the destination server (p.23, 30), and transmitting from tile first server to the sender the identity of the sender, the identity and address of the first server and the identity and address of the destination server at the time of the transmission from the



Art Unit: 2155

first server to the sender of the message and the true transmission between the first server and the destination server (p.23, 30, 34). However, **Barkan** does not explicitly teach transmitting a message via a protocol selected from a group consisting of an SMTP protocol and an ESMTP protocol. **Zabetian** teaches the electronic documents send between clients and servers using conventional protocols such as SMTP, FTP, HTTP, and other network protocol could be used to transmit electronic documents (col. 4 lines 25-55, col. 6 lines 21-37, col. 14 lines 53-66). It would have been obvious to one of ordinary skill in the Data Processing art at the time of the invention was made to combine the teachings of **Barkan and Zabetian** to have the same motivation as set forth in claim 173.

- 52. As to claim 177, **Barkan** teaches the invention as claimed, including the steps of: providing at the first server digital signature of the message and the attachment including the transmission between the first server and the destination server relating to the message from the sender (abstract, p.8, p.19, p.29, step c), and transmitting from the first server to the sender the message and the digital signature of the message and the attachment (abstract, p.12, steps (a, b, c), p.23-24, step (h), p.30, step (d), p.33, 1<sup>st</sup> paragraph).
- 53. As to claim 178, **Barkan** teaches the invention as claimed, including the steps of: transmitting from the first server to the sender the identity of the sender, the identity and address of the first server and the identity and address of the destination





Art Unit: 2155

server at the time that the message and the transmissions between the first server and the destination server are transmitted from tile first server to the sender (abstract, p.12, steps (a, b, c), p.23-24, step (h), p.30, step (d), p.33, 1<sup>st</sup> paragraph), transmitting from the sender to the first server the information transmitted from the first server to the sender, and authenticating the message at the first server on the basis of the information transmitted from the sender to the first server and representing the information previously transmitted from the first server to the sender (p. 23-24, steps j-h, p.29, 30, 31-32, 34).

54. As to claim 179, **Barkan** teaches the invention as claimed, including a method of verifying delivery at a first server of an electronic message to a destination server for a recipient, including the steps of: receiving at the first server an electronic message from a message sender for transmission to the destination server (abstract, p.23-24, step (h). p.19, step (b)), transmitting the electronic message from the first server to the destination server (abstract, p.12, steps (a, b, c), p.23-24, step (h), p.30, step (d)), receiving at the first server the transmissions between the first server and the destination server (abstract, p.8, p.19, p.29, step c), and transmitting from the first server to the sender the message and at least a particular portion of the transmissions between the first server and the destination server (abstract, p.12, steps (a, b, c), p.23-24, step (h), p.30, step (d), p.33, 1<sup>st</sup> paragraph). However, **Barkan** does not explicitly teach transmitting a message via a protocol selected from a group consisting of an SMTP protocol and an ESMTP protocol. **Zabetian** teaches the electronic documents





Art Unit: 2155

send between clients and servers using conventional protocols such as SMTP, FTP, HTTP, and other network protocol could be used to transmit electronic documents (col. 4 lines 25-55, col. 6 lines 21-37, col. 14 lines 53-66). It would have been obvious to one of ordinary skill in the Data Processing art at the time of the invention was made to combine the teachings of **Barkan and Zabetian** to include the step of using a protocol selected from a group of network conventional protocols because it would have an efficient communications system that has a capability for users to send and attach various kinds of files to electronic mail (including electronic document certification, verification, digital signature).

55. As to claim 180, **Barkan** teaches the invention as claimed, wherein the message and the at least particular portion of the transmissions to the sender are provided by the sender to the first server, and wherein the message is authenticated by the first server on the basis of the message and the at least particular portion of the transmissions from the sender to the first server (abstract, p.12, steps (a, b, c), p.23-24, step (h), p.30, step (d), p.33, 1<sup>st</sup> paragraph). However, **Barkan** does not explicitly teach transmitting a message via a protocol selected from a group consisting of an SMTP protocol and an ESMTP protocol. **Zabetian** teaches the electronic documents send between clients and servers using conventional protocols such as SMTP, FTP, HTTP, and other network protocol could be used to transmit electronic documents (col. 4 lines 25-55, col. 6 lines 21-37, col. 14 lines 53-66). It would have been obvious to one of ordinary skill in the Data Processing art at the time of the invention was made to



Page 25

Application/Control Number: 09/626,577

Art Unit: 2155

combine the teachings of **Barkan and Zabetian** to have the same motivation as set forth in claim 179.

- digital signature is provided of the message at the first server and wherein a digital signature is provided of the message at the first server and wherein the digital signature is transmitted from the first server to the sender with the message and the at least particular portion of the transmissions between the first server and the destination server and wherein the digital signature is thereafter provided by the sender to the first server with the message and the at least particular portion of the transmissions (p.23,30,34). However, **Barkan** does not explicitly teach transmitting a message via a protocol selected from a group consisting of an SMTP protocol and an ESMTP protocol. **Zabetian** teaches the electronic documents send between clients and servers using conventional protocols such as SMTP, FTP, HTTP, and other network protocol could be used to transmit electronic documents (col. 4 lines 25-55, col. 6 lines 21-37, col. 14 lines 53-66). It would have been obvious to one of ordinary skill in the Data Processing art at the time of the invention was made to combine the teachings of **Barkan and Zabetian** to have the same motivation as set forth in claim 179.
- 57. As to claim 182, **Barkan** teaches the invention as claimed, wherein a digital signature of the message and a digital signature of the transmissions are produced at the first server and are transmitted to the sender with the message and the transmissions (p.33) and wherein the digital signatures and the message and the at





Art Unit: 2155

least particular portion of the transmissions to the sender are thereafter provided by the sender to the first server and wherein digital fingerprints arc produced at the first server from the message and the digital signature of the message provided by the sender to the first server and wherein the message is authenticated at the first server by establishing an identity between the digital fingerprints produced at the first server (p. 23-24, steps j-h, p.31-32, 34). However, **Barkan** does not explicitly teach transmitting a message via a protocol selected from a group consisting of an SMTP protocol and an ESMTP protocol. **Zabetian** teaches the electronic documents send between clients and servers using conventional protocols such as SMTP, FTP, HTTP, and other network protocol could be used to transmit electronic documents (col. 4 lines 25-55, col. 6 lines 21-37, col. 14 lines 53-66). It would have been obvious to one of ordinary skill in the Data Processing art at the time of the invention was made to combine the teachings of **Barkan and Zabetian** to have the same motivation as set forth in claim 179.

58. As to claim 183, **Barkan** teaches the invention as claimed, including a method of verifying at a first server the delivery of an electronic message from the first server to a destination server for a destination address including the steps of: receiving at the first server an electronic message from a message sender for transmission to the destination server (abstract, p.23-24, step (h). p.19, step (b)), transmitting the electronic message from the first server to the destination server (abstract, p.12, steps (a, b, c), p.23-24, step (h), p.30, step (d)), receiving at the first server the transmissions between the first server and destination server (abstract, p.8, p.19, p.29, step c), transmitting





Art Unit: 2155

from the first server to the sender the message and the transmission between the first server and the destination server (abstract, p.12, steps (a, b, c), p.23-24, step (h), p.30, step (d), p.33, 1<sup>st</sup> paragraph), receiving at the first server from the sender the message and the transmission between the first server and the destination, and authenticating the message at the first server on the basis of the message received by the first server from the sender and the transmissions received by the first server from the sender (p.23-24, steps j-h, p.31-p.32). However, **Barkan** does not explicitly teach transmitting a message via a protocol selected from a group consisting of an SMTP protocol and an ESMTP protocol. Zabetian teaches the electronic documents send between clients and servers using conventional protocols such as SMTP, FTP, HTTP, and other network protocol could be used to transmit electronic documents (col. 4 lines 25-55, col. 6 lines 21-37, col. 14 lines 53-66). It would have been obvious to one of ordinary skill in the Data Processing art at the time of the invention was made to combine the teachings of Barkan and Zabetian to include the step of using a protocol selected from a group of network conventional protocols because it would have an efficient communications system that has a capability for users to send and attach various kinds of files to electronic mail (including electronic document certification, verification, digital signature).

59. As to claim 187, **Barkan** teaches the invention as claimed, including the steps of: transmitting from the sender to the first server the information transmitted from the server to the sender, and authenticating the electronic message on the basis of the



Art Unit: 2155

information transmitted from the sender to the server (abstract, p.12, steps (a, b, c), p.23-24, step (j-h), p.30, step (d), p.33, 1<sup>st</sup> paragraph).

- 60. As to claim 188, Barkan teaches the invention as claimed, including the steps of: providing a digital signature of the message and a digital signature of an attachment including the transmissions between the server and the destination server (abstract, p.8, p.19, p.29, step c), and transmitting the digital signature of the message and the digital signature of the attachment from the server to the sender at the same time that the message and the attachment are transmitted from the server to the sender (abstract, p.12, steps (a, b, c), p.23-24, step (h), p.30, step (d), p.33, 1<sup>st</sup> paragraph). However, **Barkan** does not explicitly teach transmitting a message via a protocol selected from a group consisting of an SMTP protocol and an ESMTP protocol. Zabetian teaches the electronic documents send between clients and servers using conventional protocols such as SMTP, FTP, HTTP, and other network protocol could be used to transmit electronic documents (col. 4 lines 25-55, col. 6 lines 21-37, col. 14 lines 53-66). It would have been obvious to one of ordinary skill in the Data Processing art at the time of the invention was made to combine the teachings of Barkan and Zabetian to have the same motivation as set forth in claim 159.
- 61. As to claim 189, **Barkan** teaches the invention as claimed, including the steps of: generating at the first server a digital signature of the message and a digital signature of the attachment including the transmission between the first server and the





Art Unit: 2155

destination server, and transmitting from the first server to the sender the message and the attachment and the digital signatures of the message and the attachment (abstract, p.12, steps (a, b, c), p.23-24, step (h), p.30, step (d), p.33, 1<sup>st</sup> paragraph, p.34). However, **Barkan** does not explicitly teach transmitting a message via the selected one of the protocol. **Zabetian** teaches the electronic documents send between clients and servers using conventional protocols such as SMTP, FTP, HTTP, and other network protocol could be used to transmit electronic documents (col. 4 lines 25-55, col. 6 lines 21-37, col. 14 lines 53-66). It would have been obvious to one of ordinary skill in the Data Processing art at the time of the invention was made to combine the teachings of **Barkan and Zabetian** to have the same motivation as set forth in claim 166.

62. As to claim 190, **Barkan** teaches the invention as claimed, including the steps of: providing a digital signature of the message and a digital signature of the attachment including the transmission between the first server and the destination server, and transmitting the digital signatures from the first server to the sender at the same time as the transmission from the first server to the sender of the message and the attachment (abstract, p.12, steps (a, b, c), p.23-24, step (h), p.30, step (d), p.33, 1<sup>st</sup> paragraph, p.34). However, **Barkan** does not explicitly teach transmitting a message via the selected one of the protocol. **Zabetian** teaches the electronic documents send between clients and servers using conventional protocols such as SMTP, FTP, HTTP, and other network protocol could be used to transmit electronic documents (col. 4 lines 25-55, col. 6 lines 21-37, col. 14 lines 53-66). It would have been obvious to one of





Art Unit: 2155

ordinary skill in the Data Processing art at the time of the invention was made to combine the teachings of **Barkan and Zabetian** to have the same motivation as set forth in claim 173.

- steps of: transmitting from the sender to the first server the message and the digital signature of the message and the attachment and the digital signature of the attachment including the transmissions between the first server and the destination server (abstract, p.12, steps (a, b, c), p.23-24, step (h), p.30, step (d), p.33, 1<sup>st</sup> paragraph), and authenticating the message oh the basis of the digital signatures and the message and the attachment transmitted from the sender to the first server (p.23-24, steps j-h, p.31-p.32). However, **Barkan** does not explicitly teach transmitting a message via the selected one of the protocol. **Zabetian** teaches the electronic documents send between clients and servers using conventional protocols such as SMTP, FTP, HTTP, and other network protocol could be used to transmit electronic documents (col. 4 lines 25-55, col. 6 lines 21-37, col. 14 lines 53-66). It would have been obvious to one of ordinary skill in the Data Processing art at the time of the invention was made to combine the teachings of **Barkan and Zabetian** to have the same motivation as set forth in claim 166.
- 64. As to claim 226, **Barkan** teaches the invention as claimed, including a method of authenticating a message provided by a sender (figure 1, user A) and transmitted to a destination server (figure 1, user B and mail box of user B) by a second





Art Unit: 2155

server (figure 1, mail server) displaced from the sender and the destination server, the steps at the second server of: providing an attachment transmitted between the second server and the destination server, and transmitting the attachment from the second server to the sender (abstract, p.12, steps (a, b, c), p.23-24, step (h), p.30, step (d), p.33, 1st paragraph, p.34). However, Barkan does not explicitly teach transmitting a message via a selected one of SMTP and ESMTP protocols. Zabetian teaches the electronic documents send between clients and servers using conventional protocols such as SMTP, FTP, HTTP, and other network protocol could be used to transmit electronic documents (col. 4 lines 25-55, col. 6 lines 21-37, col. 14 lines 53-66). It would have been obvious to one of ordinary skill in the Data Processing art at the time of the invention was made to combine the teachings of Barkan and Zabetian to include the step of using a protocol selected from a group of network conventional protocols because it would have an efficient communications system that has a capability for users to send and attach various kinds of files to electronic mail (including electronic document certification, verification, digital signature).

65. As to claim 227, **Barkan** teaches the invention as claimed, including the steps at second server of: providing a digital signature of the attachment at the second server, and transmitting the digital signature from the second server to the sender at the time of transmitting the attachment from the second server to the sender (abstract, p.12, steps (a, b, c), p.23-24, step (h), p.30, step (d), p.33, 1<sup>st</sup> paragraph, p.34).





Art Unit: 2155

- 66. As to claim 228, **Barkan** teaches the invention as claimed, including the steps at the second server of: receiving the attachment and the digital signature at the second server from the sender (abstract, p.12, steps (a, b, c), p.23-24, step (h), p.30, step (d), p.33, 1<sup>st</sup> paragraph, p.34), and authenticating the attachment at the second server on the basis of the attachment and the digital signature received by the second server from the sender (p.23-24, steps j-h, p.31-p.32).
- 67. As to claim 229, **Barkan** teaches the invention as claimed, including the steps at the second server of: receiving the attachment and the digital signature at the second server from the sender (p.34, step j), providing at the second server digital fingerprints of the attachment and the digital signature received at the second server from the sender, and comparing the digital fingerprints to authenticate the attachment (p. 23-24, steps j-h, p.31-p.32).

#### Conclusion

- 68. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
- 69. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thu Ha Nguyen, whose telephone number is (703) 305-7447. The examiner can normally be reached Monday through Friday from 8:00 AM to 6:00 PM.



Art Unit: 2155

Page 33

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hosain T. Alam, can be reached at (703) 308-6662.

Any inquiry of a general nature of relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-9600.

The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9306 for regular communications.

Thu Ha Nguyen

May 16, 2004

HOSAIN ALAM SUPERVISORY PATENT EXAMINER